



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,535	03/15/2001	Hubert Reinisch	4965-000115	4505

27572 7590 01/18/2005

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

PHAM, THOMAS K

ART UNIT	PAPER NUMBER
----------	--------------

2121

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/809,535

Applicant(s)

REINISCH ET AL.

Examiner

Thomas K Pham

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

1. This action is in response to request for re-consideration filed on 10/27/2004.
2. New claims 19-24 filed by the applicant have been entered.
3. Applicant's amendment, with respect to the addition of claims 19-24 and the new issue of claims 1 and 8, necessitated the new ground(s) of rejection presented in this Office action.

**Quotations of U.S. Code Title 35**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **Claim Rejections - 35 USC § 102**

6. Claims 1-11, 15, 17 and 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Dodds et al. U.S. Patent no. 5,479,618 ("Van de Steeg").

#### **Regarding claims 1 and 8**

Van de Steeg teaches process module (fig. 1 element 15) for installation in a processing station for performing a predetermined function, comprising a controller (fig. 2) associated with a program control unit into which a program for controlling the process module is supplied (fig. 3 element 24 controlling access to RAM 44 where the program stored), characterized in that the controller includes a program data administrator unit (fig. 2 element 23) which co-ordinates the transfer of the program associated with the process module from a program data memory into the program control unit (col. 4 line 66 to col. 5 line 1, "The processor 24 also connects ... program RAM 44") so that the process module and/or the processing station is/are automatically programmed when the process module is installed in the processing station (col. 3 lines 4-14, "The I/O module 15 is ... an encoder device 21, respectively").

#### **Regarding claim 2**

Van de Steeg teaches the controller comprises the program data memory (fig. 3 element 25).

#### **Regarding claims 3, 4 and 10**

Van de Steeg teaches the controller comprises the program control unit (fig. 3 element 24).

#### **Regarding claims 5 and 11**

Van de Steeg teaches the program control unit is provided as a microprocessor. (fig. 3, microprocessor 24).

#### **Regarding claim 6**

Art Unit: 2121

Van de Steeg teaches program data administrator unit comprises a memory unit for storing data specific to the process module (fig. 3, element 44).

**Regarding claim 7**

Van de Steeg teaches the program data administrator unit can be connected through a bus to the program data memory (col. 4 lines 61-63, “The processor 24 is connected ... PROM 25 identified in FIG. 2”).

**Regarding claim 9**

Van de Steeg teaches a basis controller is provided (fig. 1, element 11) and wherein the process module comprises an interface for connection to the basis controller (fig. 1, controller 11 interface with module 15 via chassis backplane 13).

**Regarding claim 15**

Van de Steeg teaches the basis controller and/or the controller are configured to establish a connection with the program data memory, which lies outside of the processing station (fig. 1 showed the basic controller 11 lies outside the processing station which connect through the backplane connector).

**Regarding claim 17**

Van de Steeg teaches after connection of a process module to the processing station via the interface, the program for controlling the process module is read out of the program data memory depending on the data specific to the process module stored in the program data administrator unit and is transferred to the program control unit (col. 3 lines 30-48, “the I/O module 15 has ... as a second byte stream”).

Art Unit: 2121

**Regarding claims 19 and 21**

Van de Steeg teaches at least one process module (fig. 1 element 15) for a processing station for performing a predetermined function, comprising a controller (fig. 2) associated with a program control unit to which a program for controlling the process module is supplied (fig. 3 element 24 controlling access to RAM 44 where the program stored), wherein the controller includes a program data administrator unit (fig. 2 element 23) which stores information identifying the program data memory containing the program and coordinates the transfer of the program associated with the process module from said program data memory into the program control unit (col. 4 line 66 to col. 5 line 1, "The processor 24 also connects ... program RAM 44").

**Regarding claims 20 and 22**

Van de Steeg teaches at least one process module (fig. 1 element 15) for a processing station for performing a predetermined function, comprising a controller (fig. 2) associated with a program control unit to which a program for controlling the process module is supplied (fig. 3 element 24 controlling access to RAM 44 where the program stored), wherein the controller includes a program data administrator unit (fig. 2 element 23) which stores information identifying the program data memory containing the program and coordinates the transfer of the program associated with the process module from said program data memory into the program control unit (col. 4 line 66 to col. 5 line 1, "The processor 24 also connects ... program RAM 44"), and wherein the controller further includes said program data memory (fig. 3 element 25).

**Regarding claims 23 and 24**

Van de Steeg teaches a processing station comprising one or more process modules (fig. 1 element 15) for controlling one or more predetermined process functions in a manufacturing

Art Unit: 2121

operation, said processing station including a basis controller (fig. 1 element 11) for controlling the operation of said one or more process modules, and wherein each of said process modules comprises a process controller for controlling the performance of one of said predetermined process functions in accordance with a process control program (fig. 3 element 24 controlling access to RAM 44 where the program stored), said process controller including a program data administrator unit (fig. 2 element 23) which stores information identifying the program data memory containing said process control program and which further coordinates the transfer of said process control program from said program data memory into said basis controller and/or said process controller (col. 4 line 66 to col. 5 line 1, "The processor 24 also connects ... program RAM 44") so that the process module and/or the processing station is/are automatically programmed when said process module is installed in said processing station (col. 3 lines 4-14, "The I/O module 15 is ... an encoder device 21, respectively").

### **Claim Rejections - 35 USC § 103**

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van de Steeg in view of U.S. Patent 4,972,365 ("Dodds").

#### **Regarding claim 12**

Van de Steeg does not teach several process modules are provided and wherein the programs associated with the process modules are supplied to the program control unit. However, Dodds teaches several process modules are provided connected via a backplane (fig. 1, multiple modules 14 and 15) and wherein the programs associated with the process modules are supplied to the program control unit (col. 4 lines 15-22, "The processor unit 10 executes ... in the user

Art Unit: 2121

control program”) for the purpose connecting multiple modules in the same backplane for centrally controlling one of many industrial applications using one control unit. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the multiple modules of Dodds with the system of Van de Steeg because it would provide for centrally controlling one of many industrial applications using one control unit.

**Regarding claim 13**

Dodds teaches the program control unit comprises several microprocessors, so that the programs associated with the process modules are supplied to run in parallel on the different microprocessors (fig. 2 show that each of the I/O logic modules 14 and 15 has its own program processor 29).

**Regarding claim 14**

Dodds teaches at least one of the microprocessors is provided in a controller of the process module (fig. 2).

8. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van de Steeg in view of in view of U.S. Patent no. 6,038,486 (“Saitoh”).

**Regarding claim 16**

Van de Steeg does not teach the connection to the program data memory takes place over the Internet, and wherein the program data memory is provided in a server connected to the Internet. However, Saitoh teaches the connection to the program data memory takes place over the Internet, and wherein the program data memory is provided in a server connected to the Internet (col. 2 lines 51-56, “the FA server system ... arbitrary personal computer 10”) for the purpose of



Art Unit: 2121

transferring program files at any remote location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Internet communication of Saitoh with the system of Van de Steeg because it would provide for the purpose of transferring program files at any remote location.

**Regarding claim 18**

Saitoh teaches the data specific to the process module comprise at least one of the following data: storage location of the program, target location for the transfer of the program and identification data of the process module (col. 3 lines 57-65, "FA server 4 retains ... executed at this time").

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2121

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (703) 872- 9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Thomas Pham**  
*Patent Examiner*

TP

January 13, 2005

  
**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**